



Control approach 1

Fume control and general ventilation

RB01

General ventilation



This guidance sheet is for employers to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (COSHH) by controlling exposure to chemicals and protecting workers' health.

The sheet is part of HSE guidance *COSHH essentials: easy steps to control chemicals*. It describes the key points you need to follow to help reduce exposure to an adequate level. It is important to follow all the points, or use equally effective measures.

Rubber fume is given off in making natural or synthetic rubber when converting blended ingredients into finished parts or products.

Rubber fume can cause cancer.

Control approach 1 (general ventilation) is recommended to control fume that is not captured by local exhaust ventilation (LEV).

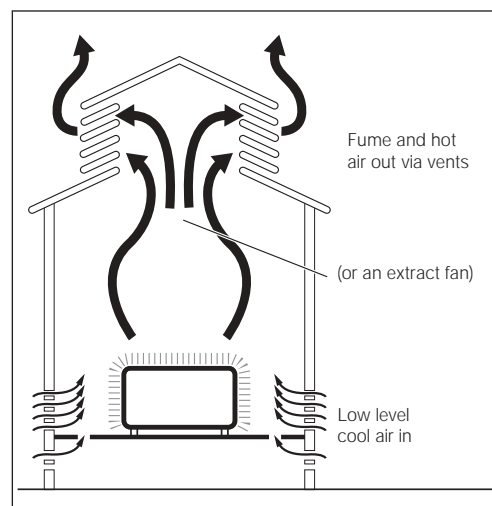
For environmental advice see Further information on back page.

Access

- ✓ Restrict access to those staff who need to be there.

Design and equipment

- ✓ The air should be free of fume. Fume is hot and tends to rise.
- ✓ Use high-level air vents or extraction fans so hot air leaves the building. Use low-level air inlets.
- ✓ Inlet air may need warming in winter.
- ✓ Ensure the flow of air into and out of the building is not obstructed.
- ✓ Good general ventilation means rapid fume clearance and a through draught.
- ✓ Confirm that fan extractors are switched on and blades are turning. Consider linking the fan with lighting.
- ✓ If you have an overhead travelling crane, the driver's cab needs a clean air supply.



Maintenance

- ✓ Follow instructions in maintenance manuals.
- ✓ If the extractor fan stops, or is faulty, get it repaired immediately.
- ✓ Keep equipment in effective and efficient working order.

Examination and testing

- ✓ At least once a week, check visually that the roof vents or the extractor fan are clearing the fume properly.
- ✓ Noisy or vibrating fans can indicate a problem. Repair damage immediately.
- ✓ You need to know the manufacturer's performance specification to know if extraction is working properly.
- ✓ If this information isn't available, hire a competent ventilation engineer to determine its performance.
- ✓ Keep this information in your testing logbook.
- ✓ Get a competent ventilation engineer to examine the system thoroughly and test its performance regularly.
- ✓ Keep records of all examinations and tests for at least five years.

Cleaning and housekeeping

- ✓ Every day, clear up accumulations of dirt in areas where people work all the time.

- ✓ Clean general workrooms once a week to stop dust being stirred up and to reduce slips.
- ✓ Use a Type H vacuum cleaner fitted with a HEPA filter to clear up dust.

Personal protective equipment (PPE)

- ✓ Ask your safety-clothing supplier to help you get the right PPE.
- ✓ Respiratory protective equipment (RPE) - a dust mask - is needed for cleaning.
- ✓ Use a P3 standard of RPE (Assigned Protection Factor 20). Consult your supplier for advice.
- ✓ Replace RPE filters as recommended by the supplier. Throw away disposable masks after one use.
- ✓ Keep RPE clean and store it away from dust.
- ✓ Throw away single-use gloves every time you take them off.
- ✗ Workers must not take their coveralls home for washing. Use a contract laundry.

Training

- ✓ Tell workers that rubber process dust and fume can cause cancer.
- ✓ Provide health and safety training. Include managers. Ask your trade association (eg BRMA or RMA) for advice on training providers.
- ✓ Ensure training includes how to keep exposures low; how to check that the extraction system is working; how to use and look after PPE and RPE; and what to do if something goes wrong.

Supervision

- ✓ Check that the extraction is working properly; PPE is being used properly; and the rules on personal hygiene are being followed.
- ✓ Ask your workers to check their skin for dryness or soreness every six months. If these effects appear, check the proper use of skin creams and PPE.

Further information

- *General ventilation in the workplace: Guidance for employers* HSG202 HSE Books 2000 ISBN 0 7176 1793 9
- *A new practical guide to complying with COSHH in the rubber industry* Guidance HSE Books 1997 ISBN 0 7176 1372 0
- *The selection, use and maintenance of respiratory protective equipment: A practical guide* HSG53 (Second edition) HSE Books 1998 ISBN 0 7176 1537 5
- *Safe to breathe: Dust and fume control in the rubber industry* Leaflet IACL95 HSE Books 1995 (single copy free or priced packs of 10 ISBN 0 7176 0979 0)
- *Controlling airborne contaminants in the workplace* Technical Guide TG7 British Occupational Hygiene Society 1987 ISBN 0 9059 2742 7

Depending on the scale of work, releases into the atmosphere may be regulated within the pollution prevention and control (PPC) framework. You should consult your local authority or the Environment Agency. In Scotland, consult the Scottish Environment Protection Agency (SEPA). They will advise you if PPC legislation applies to your company, and about air cleaning and discharging emissions into the air. Otherwise, minimise emissions into the air.

Employee checklist

- Is the extraction switched on and working properly?
- If you find any problems, tell your supervisor. Don't just carry on working.
- Use, maintain and store your PPE in accordance with instructions.
- Wash your hands before and after eating, drinking, smoking and using the lavatory.
- Never use solvents to clean your skin.
- Use skin creams provided as instructed.



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